

In re Application of:
Yoo, et al.

Serial No.: 10/023,125

Confirmation No.: 4585

Filed: December 17, 2001

**For: Pulse Nucleation Enhanced
Nucleation Technique for
Improved Step Coverage
and Better GAP Fill for
WCVD Process**

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Group Art Unit: 1765

Examiner: Unknown

**MAIL STOP AMENDMENT**  
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37 CFR 1.8

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The Applicants, and the Attorney who signs below on the basis of the information supplied by the inventor and the information in his file, submit herewith patents, publications, or other information of which they are aware, which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

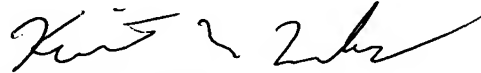
While the information submitted in this Supplemental Information Disclosure Statement may be material pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that any patent, publication, or other information referred to therein is prior art for this invention unless specifically designated as such.

In accordance with 37 CFR § 1.97, this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other possibly material information as defined under 37 CFR § 1.56(a) exists.

The patents and/or publications submitted herewith are set forth on the attached Form PTO-1449.

If the sum of \$180.00 is due under 37 CFR § 1.17(p) pursuant to § 1.97, the Commissioner is hereby authorized to charge this fee, and any other fee necessary to make this submission timely, to the Deposit Account No. 20-0782/AMAT/5730/KMT.

Respectfully submitted,



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Attorney for Applicant(s)



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# **SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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1

of

3

Application Number

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First Named Inventor

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Submission Date

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## **U.S. PATENT DOCUMENTS**

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|--------------------|-----------------------|------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|
|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |                                                    |                                                                                 |
|                    | A1                    | 6815285                                  | 11/09/2004                     | CHOI, ET AL.                                       |                                                                                 |
|                    | A2                    | 6686271                                  | 02/03/2004                     | RAAIJMAKERS, ET AL.                                |                                                                                 |
|                    | A3                    | 6660126                                  | 12/09/2003                     | NGUYEN, ET AL.                                     |                                                                                 |
|                    | A4                    | 6630201                                  | 10/07/2003                     | CHIANG, ET AL.                                     |                                                                                 |
|                    | A5                    | 6620723                                  | 09/16/2003                     | BYUN, ET AL.                                       |                                                                                 |
|                    | A6                    | 6607976                                  | 08/19/2003                     | CHEN, ET AL.                                       |                                                                                 |
|                    | A7                    | 6599572                                  | 07/29/2003                     | SAANILA, ET AL.                                    |                                                                                 |
|                    | A8                    | 6569501                                  | 05/27/2003                     | CHIANG, ET AL.                                     |                                                                                 |
|                    | A9                    | 6551929                                  | 04/22/2003                     | KORI, ET AL.                                       |                                                                                 |
|                    | A10                   | 6428859                                  | 08/06/2002                     | CHIANG, ET AL.                                     |                                                                                 |
|                    | A11                   | 6416822                                  | 07/09/2002                     | CHIANG, ET AL.                                     |                                                                                 |
|                    | A12                   | 6335280                                  | 01/01/2002                     | VAN DER JEUGD                                      |                                                                                 |
|                    | A13                   | 6218298                                  | 04/17/2001                     | HOINKIS                                            |                                                                                 |
|                    | A14                   | 6156382                                  | 12/05/2000                     | RAJAGOPALAN, ET AL.                                |                                                                                 |
|                    | A15                   | 5834372                                  | 11/10/1998                     | LEE                                                |                                                                                 |
|                    | A16                   | 5804488                                  | 09/08/1998                     | SHIH, ET AL.                                       |                                                                                 |
|                    | A17                   | 20050006799                              | 01/13/2005                     | GREGG, ET AL.                                      |                                                                                 |
|                    | A18                   | 20040041320                              | 03/04/2004                     | HODUMI                                             |                                                                                 |
|                    | A19                   | 20040018723                              | 01/29/2004                     | BYUN, ET AL.                                       |                                                                                 |
|                    | A20                   | 20040018304                              | 01/29/2004                     | CHUNG, ET AL.                                      |                                                                                 |
|                    | A21                   | 20040015300                              | 01/22/2004                     | GANGULI, ET AL.                                    |                                                                                 |
|                    | A22                   | 20040014320                              | 01/22/2004                     | CHEN, ET AL.                                       |                                                                                 |
|                    | A23                   | 20040014315                              | 01/22/2004                     | LAI, ET AL.                                        |                                                                                 |
|                    | A24                   | 20040013577                              | 01/22/2004                     | GANGULI, ET AL.                                    |                                                                                 |
|                    | A25                   | 20040011504                              | 01/22/2004                     | KU, ET AL.                                         |                                                                                 |
|                    | A26                   | 20040009307                              | 01/15/2004                     | KOH, ET AL.                                        |                                                                                 |
|                    | A27                   | 20040005749                              | 01/08/2004                     | CHOI, ET AL.                                       |                                                                                 |
|                    | A28                   | 20030224217                              | 12/04/2003                     | BYUN, ET AL.                                       |                                                                                 |

Examiner

Date Considered

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Sheet 2

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|                        |                    |
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| Filing Date            | December 17, 2001  |
| First Named Inventor   | Yoo, et al.        |
| Group Art Unit         | 1765               |
| Examiner Name          | Unknown            |
| Attorney Docket Number | AMAT/5730/TCG/WCVD |
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|                    | A29                   | 20030203616                              | 10/30/2003                     | CHUNG, ET AL.                                      |                                                                                 |
|                    | A30                   | 20030194825                              | 10/16/2003                     | LAW, ET AL.                                        |                                                                                 |
|                    | A31                   | 20030194493                              | 10/16/2003                     | CHANG, ET AL.                                      |                                                                                 |
|                    | A32                   | 20030190804                              | 10/09/2003                     | GLENN, ET AL.                                      |                                                                                 |
|                    | A33                   | 20030190423                              | 10/09/2003                     | YANG, ET AL.                                       |                                                                                 |
|                    | A34                   | 20030186495                              | 10/02/2003                     | SAANILA, ET AL.                                    |                                                                                 |
|                    | A35                   | 20030161952                              | 08/28/2003                     | WANG, ET AL.                                       |                                                                                 |
|                    | A36                   | 20030153181                              | 08/14/2003                     | YOON, ET AL.                                       |                                                                                 |
|                    | A37                   | 20030143839                              | 07/31/2003                     | RAAIJMAKERS, ET AL.                                |                                                                                 |
|                    | A38                   | 20030143328                              | 07/31/2003                     | CHEN, ET AL.                                       |                                                                                 |
|                    | A39                   | 20030134508                              | 07/17/2003                     | RAAIJMAKERS, ET AL.                                |                                                                                 |
|                    | A40                   | 20030129826                              | 07/10/2003                     | WERKHOVEN, ET AL.                                  |                                                                                 |
|                    | A41                   | 20030123216                              | 07/03/2003                     | YOON, ET AL.                                       |                                                                                 |
|                    | A42                   | 20030116087                              | 06/26/2003                     | NGUYEN, ET AL.                                     |                                                                                 |
|                    | A43                   | 20030104126                              | 06/05/2003                     | FANG, ET AL.                                       |                                                                                 |
|                    | A44                   | 20030082301                              | 05/01/2003                     | CHEN, ET AL.                                       |                                                                                 |
|                    | A45                   | 20030082296                              | 05/01/2003                     | ELERS, ET AL.                                      |                                                                                 |
|                    | A46                   | 20030054631                              | 05/20/2003                     | RAAIJMAKERS, ET AL.                                |                                                                                 |
|                    | A47                   | 20030053799                              | 03/20/2003                     | LEI                                                |                                                                                 |
|                    | A48                   | 20030049931                              | 03/13/2003                     | BYUN, ET AL.                                       |                                                                                 |
|                    | A49                   | 20030013300                              | 01/16/2003                     | BYUN                                               |                                                                                 |
|                    | A50                   | 20020197863                              | 12/26/2002                     | MAK, ET AL.                                        |                                                                                 |
|                    | A51                   | 20020197402                              | 12/26/2002                     | CHIANG, ET AL.                                     |                                                                                 |
|                    | A52                   | 20020164423                              | 11/07/2002                     | CHIANG, ET AL.                                     |                                                                                 |
|                    | A53                   | 20020164421                              | 11/07/2002                     | CHIANG, ET AL.                                     |                                                                                 |
|                    | A54                   | 20020146511                              | 10/10/2002                     | CHIANG, ET AL.                                     |                                                                                 |
|                    | A55                   | 20020144657                              | 10/10/2002                     | CHIANG, ET AL.                                     |                                                                                 |
|                    | A56                   | 20020144655                              | 10/10/2002                     | CHIANG, ET AL.                                     |                                                                                 |

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|                    | A57                   | 20020121342                              | 09/05/2002                     | NGUYEN, ET AL.                                     |                                                                                 |
|                    | A58                   | 20020121241                              | 09/05/2002                     | NGUYEN, ET AL.                                     |                                                                                 |
|                    | A59                   | 20020104481                              | 08/08/2002                     | CHIANG, ET AL.                                     |                                                                                 |
|                    | A60                   | 20020086111                              | 07/04/2002                     | BYUN, ET AL.                                       |                                                                                 |
|                    | A61                   | 20020076508                              | 06/20/2002                     | CHIANG, ET AL.                                     |                                                                                 |
|                    | A62                   | 20020076481                              | 06/20/2002                     | CHIANG, ET AL.                                     |                                                                                 |
|                    | A63                   | 20020073924                              | 06/20/2002                     | CHIANG, ET AL.                                     |                                                                                 |
|                    | A64                   | 20020068458                              | 06/06/2002                     | CHIANG, ET AL.                                     |                                                                                 |
|                    | A65                   | 20020060363                              | 05/23/2002                     | XI, ET AL.                                         |                                                                                 |

## FOREIGN PATENT DOCUMENTS

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|                    |                       | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) |                                |                                                    |                                                                                 |                |
|                    | B1                    | WO 02/46489                                                                       | 06/13/2002                     | CHIANG, ET AL.                                     |                                                                                 |                |
|                    | B2                    | WO 02/45871                                                                       | 06/13/2002                     | ANGSTRON SYSTEMS,<br>INC.                          |                                                                                 |                |
|                    | B3                    | WO 02/01628                                                                       | 01/03/2002                     | APPLIED MATERIALS, INC.                            |                                                                                 |                |
|                    | B4                    | JP 2000-178735                                                                    | 06/27/2000                     | HOTAKA, ET AL.                                     |                                                                                 |                |

## NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T <sup>2</sup> |
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